

LISTING OF THE CLAIMS

This listing of claims will replace all prior versions of claims in the application.

Listing of Claims:

1. (currently amended) A system comprising:

a first agent ~~configured~~ having a first circuit to generate a first signal, wherein said first signal is indicative, in a first state, that said first agent is available to participate in subsequent transactions with a plurality of other agents on a bus, and wherein said first signal is indicative, in a second state, that said first agent is unavailable to participate in subsequent transactions with said plurality of said other agents; and

a second agent having a second circuit coupled to receive said first signal from said first circuit, wherein when said second agent is ~~configured~~ to initiate a first transaction for which with said first agent is a participant responsive to said first signal being in said first state, and wherein said second agent is configured to initiate a second transaction for which said first agent is a non-participant responsive to said first signal being in said second state, said second circuit to identify an address of said first transaction as related to said first agent and in response, said second circuit determines if said first signal from said first circuit is in said first or second state and said second agent to perform said first transaction with said first agent when said first signal is in said first state.

2. (currently amended) The system as recited in claim 1 wherein said second circuit inhibits said second agent is configured to inhibit from initiating said first transaction if said first signal is in said second state.

3. (canceled)

4. (currently amended) The system as recited in claim 2 wherein said first agent ~~is said participant in said first transaction if said first agent~~ includes an internal cache to be snooped in response to said first transaction.

5. (currently amended) The system as recited in claim 2 wherein said first agent ~~is said participant in said first transaction if said first agent is~~ includes a cache and said first transaction is a cacheable transaction for said cache.

6. (currently amended) The system as recited in claim 2 wherein said second agent ~~is configured to circuit~~ inhibits initiating said first transaction by preventing arbitration for a said bus on which said first transaction is to be transmitted.

7. (currently amended) The system as recited in claim 2 wherein said second agent ~~is configured to circuit~~ inhibits initiating said first transaction by transmitting an invalid command if said second agent wins an arbitration for a said bus on which said first transaction is to be transmitted.

8. (currently amended) The system as recited in claim 1 wherein said first agent ~~comprises~~ includes a queue ~~configured to store a plurality of transactions until the transactions are acted upon by said first agent, and wherein said first agent is configured to generate said first signal~~ said first or second state of said first signal is responsive to a number of free entries ~~of~~ available in said queue.

9. (currently amended) The system as recited in claim 8 wherein ~~said first agent is configured to generate said first signal in~~ generates said second state responsive to ~~one~~ one or fewer free entries being free remaining in said queue.

10. (currently amended) The system as recited in claim 1 further comprising a third agent ~~configured~~ having a third circuit to generate a second signal ~~indicative, in a first state, that in which a state of said second signal indicates availability of said third agent is available to participate in subsequent transactions, and indicative, in a second state, that said third agent is unavailable to participate in subsequent transactions, with said plurality of agents on said bus~~ and wherein said second circuit of said second agent is coupled to receive said second signal, ~~and wherein said third agent is a non-participant in said~~

~~second transaction, and wherein said second agent is configured to initiate said second transaction even if said second signal is in said second state wherein said second circuit to identify an address of a second transaction from said second agent as related to said third agent and in response, determines if said second signal from said third circuit is in a state to allow said second agent to perform said second transaction.~~

11. (currently amended) The system as recited in claim 10 wherein ~~said second agent is configured to~~ second circuit inhibits said second agent from initiating ~~a third~~ said second transaction ~~in which said third agent is a participant if said second signal is in said second a state in which said third agent is not available for said second transaction.~~

12. (canceled)

13. (currently amended) The system as recited in claim ~~12~~ 11 wherein said first signal is indicative of whether or not a memory transaction is to be issued, ~~and wherein said second transaction is an input/output transaction.~~

14. (currently amended) The system as recited in claim ~~12~~ 13 wherein ~~said first~~ second signal is indicative of whether or not an input/output transaction is to be issued, ~~and wherein said second transaction is a memory transaction.~~

15-17. (canceled)

18. (currently amended) An ~~agent~~ apparatus comprising:

~~a first storage location configured~~ device to store ~~a first~~ transaction to be initiated ~~by said to be performed with a first agent; and~~

~~a circuit coupled to said first storage location~~ device and also coupled to a bus to receive a first signal indicative of whether or not ~~a second~~ said first agent is available to participate in transactions ~~initiated by one of a plurality of agents coupled to said bus, and wherein said circuit is configured to selectively inhibit initiation of said transaction if said first signal indicates that said second agent is unavailable to participate in transactions,~~

~~dependent on whether or not said second agent is a participant in said transaction included within a second agent, in which said circuit to identify an address of said first transaction as related to said first agent and in response, said circuit determines if said first signal indicates if said first agent is available and if said first agent is available, to perform said first transaction with said first agent.~~

19. (currently amended) The ~~agent~~ apparatus as recited in claim 18 wherein said circuit ~~is configured to~~ inhibits initiating said first transaction if said ~~second agent is a participant in said transaction~~ first signal indicates that said first agent is not available.

20. (currently amended) The ~~agent~~ apparatus as recited in claim ~~19~~ 18 wherein said circuit ~~is configured to~~ inhibits arbitration for a said bus to initiate said first transaction ~~responsive to~~ if said first signal ~~indicating~~ indicates that said ~~second~~ first agent is unavailable to participate in transactions if said ~~second agent is said participant in said transaction.~~

21. (currently amended) The ~~agent~~ apparatus as recited in claim 19 wherein said circuit ~~is configured to~~ performs an invalid command on a said bus if said second agent wins an arbitration for said bus to initiate said first transaction, ~~responsive to but~~ said first signal ~~indicating~~ indicates that said ~~second~~ first agent is unavailable to participate in transactions ~~and said second agent is a participant in said transaction with said plurality of agents on said bus, including said second agent.~~

22. (currently amended) The ~~agent~~ apparatus as recited in claim 19 wherein said circuit ~~is configured to determine that said second agent is said participant in said transaction by decoding at least a portion of an address of said transaction~~ decodes said address and performs a logical operation of a decoded signal with said first signal to generate a control signal to allow or not allow said first transaction.

23-24. (canceled)

25. (currently amended) The ~~agent apparatus~~ as recited in claim 18 ~~further comprising wherein said storage device includes a queue including said first storage location, wherein said queue is configured to store a plurality of transactions to be initiated by said second agent.~~

26. (currently amended) The ~~agent apparatus~~ as recited in claim 18 wherein said circuit is coupled to receive a second signal indicative of whether or not a third agent is available to participate in transactions with said plurality of agents coupled on said bus, and wherein said circuit ~~is configured to selectively to inhibit initiation of said a second transaction with said third agent~~, if said second signal indicates that said third agent is unavailable to participate in transactions; ~~dependent on whether or not said third agent is a participant in said transaction.~~

27. (currently amended) A method comprising:

receiving a first signal indicative of whether or not a first agent is available to participate in subsequent transactions with a plurality of agents coupled on a bus, including a second agent; and

identifying an address of a first transaction of said second agent as a transaction with said first agent;

performing a logical operation of a decoded address signal of said first transaction with said first signal to generate a control signal; and

selectively inhibiting initiation of a said first transaction by use of said control signal, if said first signal indicates that said first agent is unable to participate in subsequent transactions; ~~dependent on whether or not said first agent is a participant in said transaction~~ said first transaction.

28-30. (canceled)

31. (currently amended) The method as recited in claim ~~28~~ wherein said first agent is said participant in 27 further including performing said first transaction if said first agent includes an internal cache to be snooped in response to said first transaction and if said

first agent is available.

32. (currently amended) The method as recited in claim ~~28~~ 27 wherein ~~said first agent is said participant in~~ 27 further including performing said first transaction if said first agent is includes a cache and said first transaction is a cacheable transaction and if said first agent is available.

33. (currently amended) The method as recited in claim ~~28~~ 27 wherein said inhibiting ~~comprises~~ includes inhibiting arbitration for a bus on which said first transaction is to be initiated.

34. (currently amended) The method as recited in claim ~~28~~ 27 wherein said inhibiting ~~comprises~~ includes transmitting an invalid command on ~~a said bus, on which said transaction is to be initiated~~ if an arbitration for said bus is won by ~~a said second agent to initiate said first transaction, but said first agent is unavailable.~~

35. (currently amended) The method as recited in claim 27 further comprising:
receiving a second signal indicative of whether or not ~~a second~~ third agent is available to participate in subsequent transactions on the bus with said plurality of agents, including said second agent; and

selectively-inhibiting initiation of said a second transaction by said second agent to transact with said third agent, if said second signal indicates that ~~said second~~ third agent is unavailable to participate in transactions, ~~dependent on whether or not said second agent is a participant in said transaction.~~

36. (canceled)

37. (currently amended) A carrier medium comprising a database which is operated upon by a program executable on a computer system, the program operating on the database to perform a portion of a process to fabricate an integrated circuit including circuitry described by the database, the circuitry described in the database including a

system comprising:

a first agent ~~configured~~ having a first circuit to generate a first signal, wherein said first signal is indicative, in a first state, that said first agent is available to participate in subsequent transactions with a plurality of other agents on a bus, and wherein said first signal is indicative, in a second state, that said first agent is unavailable to participate in subsequent transactions with said plurality of said other agents; and

a second agent having a second circuit coupled to receive said first signal from said first circuit, wherein when said second agent is ~~configured~~ to initiate a first transaction ~~for which with~~ said first agent is ~~a participant responsive to said first signal being in said first state, and wherein said second agent is configured to initiate a second transaction for which said first agent is a non-participant responsive to said first signal being in said second state,~~ said second circuit to identify an address of said first transaction as related to said first agent and in response, said second circuit determines if said first signal from said first circuit is in said first or second state and said second agent to perform said first transaction with said first agent when said first signal is in said first state.

38. (currently amended) The carrier medium as recited in claim 37 wherein said second circuit inhibits said second agent ~~is configured to inhibit from~~ initiating said first transaction if said first signal is in said second state.

39. (canceled)

40. (currently amended) The carrier medium as recited in claim 38 wherein said first agent ~~is said participant in said first transaction if said first agent~~ includes an internal cache to be snooped in response to said first transaction.

41. (currently amended) The carrier medium as recited in claim 38 wherein said first agent ~~is said participant in said first transaction if said first agent is~~ includes a cache and said first transaction is a cacheable transaction for said cache.

42. (currently amended) The carrier medium as recited in claim 38 wherein said second ~~agent is configured to circuit~~ inhibits initiating said first transaction by preventing arbitration for a said bus on which said first transaction is to be transmitted.

43. (currently amended) The carrier medium as recited in claim 38 wherein said second ~~agent is configured to circuit~~ inhibits initiating said first transaction by transmitting an invalid command if said second agent wins an arbitration for a said bus on which said first transaction is to be transmitted.

44. (currently amended) The carrier medium as recited in claim 37 wherein said first agent ~~comprises~~ includes a queue ~~configured to store a plurality of transactions until the transactions are acted upon by said first agent, and wherein said first agent is configured to generate said first signal~~ said first or second state of said first signal is responsive to a number of free entries of available in said queue.

45. (currently amended) The carrier medium as recited in claim 44 wherein ~~said first agent is configured to generate said first signal in~~ generates said second state responsive to ~~one or fewer free entries being free remaining in said queue.~~

46. (currently amended) The carrier medium as recited in claim 37 wherein the system further comprises a third agent ~~configured having a third circuit to generate a second signal indicative, in a first state, that in which a state of said second signal indicates availability of said third agent is available to participate in subsequent transactions, and indicative, in a second state, that said third agent is unavailable to participate in subsequent transactions, with said plurality of agents on said bus and wherein said second circuit of said second agent is coupled to receive said second signal, and wherein said third agent is a non-participant in said second transaction, and wherein said second agent is configured to initiate said second transaction even if said second signal is in said second state wherein said second circuit to identify an address of a second transaction from said second agent as related to said third agent and in response, determines if said second signal from said third circuit is in a state to allow said second agent to perform~~

said second transaction.

47. (currently amended) The carrier medium as recited in claim 46 wherein ~~said-second agent is configured to~~ second circuit inhibits said second agent from initiating a third said second transaction in which said third agent is a participant if said second signal is in ~~said second~~ a state in which said third agent is not available for said second transaction.

48. (canceled)

49. (currently amended) The carrier medium as recited in claim ~~48~~ 47 wherein said first signal is indicative of whether or not a memory transaction is to be issued, ~~and wherein said second transaction is an input/output transaction.~~

50. (currently amended) The carrier medium as recited in claim ~~48~~ 49 wherein said ~~first~~ second signal is indicative of whether or not an input/output transaction is to be issued, ~~and wherein said second transaction is a memory transaction.~~

51-53. (canceled)

54. (currently amended) A carrier medium comprising a database which is operated upon by a program executable on a computer system, the program operating on the database to perform a portion of a process to fabricate an integrated circuit including circuitry described by the database, the circuitry described in the database including an agent apparatus comprising:

a first storage location configured device to store a first transaction to be initiated by said to be performed with a first agent; and

a circuit coupled to said first storage location device and also coupled to a bus to receive a first signal indicative of whether or not a second said first agent is available to participate in transactions initiated by one of a plurality of agents coupled to said bus, and wherein said circuit is configured to selectively inhibit initiation of said transaction if said first signal indicates that said second agent is unavailable to participate in transactions,

~~dependent on whether or not said second agent is a participant in said transaction included within a second agent, in which said circuit to identify an address of said first transaction as related to said first agent and in response, said circuit determines if said first signal indicates if said first agent is available and if said first agent is available, to perform said first transaction with said first agent.~~

55. (currently amended) The carrier medium as recited in claim 54 wherein said circuit ~~is configured to~~ inhibits initiating said first transaction if ~~said second agent is a participant in said transaction~~ first signal indicates that said first agent is not available.

56. (currently amended) The carrier medium as recited in claim 55 wherein said circuit ~~is configured to~~ inhibits arbitration for a said bus to initiate said first transaction ~~responsive to if~~ said first signal ~~indicating~~ indicates that said ~~second~~ first agent is unavailable to ~~participate in transactions if said second agent is said participant in said transaction.~~

57. (currently amended) The carrier medium as recited in claim 55 wherein said circuit ~~is configured to~~ performs an invalid command on a said bus if said second agent wins an arbitration for said bus to initiate said first transaction, ~~responsive to but~~ said first signal ~~indicating~~ indicates that said ~~second~~ first agent is unavailable to participate in transactions ~~and said second agent is a participant in said transaction with said plurality of agents on said bus, including said second agent.~~

58. (currently amended) The carrier medium as recited in claim 55 wherein said circuit ~~is configured to determine that said second agent is said participant in said transaction by decoding at least a portion of an address of said transaction~~ decodes said address and performs a logical operation of a decoded signal with said first signal to generate a control signal to allow or not allow said first transaction.

59-60. (canceled)

61. (currently amended) The carrier medium as recited in claim 54 wherein said ~~agent further comprises~~ storage device includes a queue ~~including said first storage location, wherein said queue is configured~~ to store a plurality of transactions to be initiated by said second agent.

62. (currently amended) The carrier medium as recited in claim 54 wherein said circuit is coupled to receive a second signal indicative of whether or not a third agent is available to participate in transactions with said plurality of agents coupled on said bus, and wherein said circuit ~~is configured to selectively to inhibit initiation of said a second transaction with said third agent~~, if said second signal indicates that said third agent is unavailable to participate in transactions, ~~dependent on whether or not said third agent is a participant in said transaction.~~